

Modern treatment era has substantially improved clinical outcomes for people with MS



Over the last 15 years the treatment landscape has substantially improved for people with relapsing remitting MS, and in Australia 11 disease modifying therapy options are currently available for people with this form of MS.

New research has again shown that the clinical outlook for people with MS in the modern treatment era has significantly improved compared to earlier historical studies of MS. Published in the medical journal *Annals of Neurology*, this study followed 471 people over ten years of their MS journey and their

symptoms and disability worsening was measured in a number of ways.

Nearly half of the people with MS experienced no worsening of their disability over the ten years. This included no increases in disability on the commonly used global measure for disability (the expanded disability status scale (EDSS)) as well as no increases in symptoms related to walking ability and speeds, upper limb function and cognitive changes, such as thinking and memory.

The people included in the study were all patients at the MS Centre at the University of California, San Francisco and most people were on active treatment. Many patients needed to change treatments over the ten years to therapies with higher potency. The authors feel that the active treatment of patients (meaning a proactive approach to treatment with regular monitoring) contributed to the good outcomes seen in this group.

Historical studies from 10 years ago show that just over half of people with relapsing remitting MS will convert to secondary progressive MS after 19 years. This means that in this current study between 36-50% of people would have been expected to convert to secondary progressive MS over the time of this study. In fact, only 11.3% converted to secondary progressive MS in this time, a substantial improvement.

The rate of disability accumulation was also much slower. In this group, after almost 17 years since the start of their MS, 10.7% of people in the study showed a high level of disability (6 or more on the EDSS scale), whereas based on earlier cohorts, half of the patients would have been expected to be at this disability level.

Higher vitamin D blood levels did seem to improve the short term disease activity seen in this group, but did not, however, appear to have an effect on the long term disability outcomes.

The study also revealed important information with implications for clinical trials. They found that measures of disability taken over two years, the typical time period for a clinical trial, did not seem to reflect changes over the long term. New or active lesions seen on magnetic resonance images (MRI) for example, did not predict the disability level seen after the ten years.

Overall, this research shows that outcomes have improved for people with MS over the last ten years, likely due to improvements in treatments available for MS during this time. The authors stated ‘active management with disease modifying therapies influenced the overall favourable outcomes’, and provides encouragement that the currently available treatments are making a real difference to the lives of people with MS.

While the outcomes for the people in this group were very positive, it must be remembered that 59% of patients in this study did have an increase in their disability over the time of the trial, and this rate was higher for those people with progressive MS. This highlights the need for further effective treatments for relapsing remitting MS and treatment options that are successful against the progressive forms of the disease. Some developments have recently been made in this area with promising clinical trial data for [ocrelizumab](#) and [biotin](#) in progressive forms of MS. MS Research Australia is also working hard with our colleagues in the [International Progressive MS Alliance](#) to accelerate solutions for people with progressive MS.